

LISTING OF CLAIMS

This listing of claims shall replace all prior versions and listings of claims in the application.

Claims:

1. (Currently Amended) A polymer composition for encapsulating or carrying ~~a one or more~~ chemical and/or biological ~~agent~~ agents, comprising ~~either~~ a polyamine or oxirane composition or mixture thereof.
2. (Currently Amended) ~~The A composition as claimed in~~ of claim 1, wherein the polymer composition is cationic.
3. (Currently Amended) ~~The A composition as claimed in either of~~ claim 1 ~~or 2~~, wherein the oxirane ~~composition comprises~~ is selected from (chloromethyl) oxirane, (bromoethyl) oxirane or ~~a mixture~~ mixtures thereof.
4. (Currently Amended) ~~The A composition as claimed in any preceding claim of~~ claim 1, wherein the composition comprises~~[[.]]~~;
 - (a) 1,6-hexane diamine N-(6-aminoethyl);
 - (b) 1H-imidazole chloro methyl oxirane copolymer; and optionally
 - (c) water.
5. (Cancelled).
6. (Currently Amended) ~~The A composition as claimed in either claim 4 or 5 of~~ claim 4, wherein the 1,6-hexane diamine N-(6-aminoethyl) ~~is mixed with~~ comprises chloromethyl oxirane.
7. (Currently Amended) ~~The A composition as claimed in~~ of claim 6 ~~1~~, ~~wherein the composition comprises the ingredients in the following quantities comprising:~~
 - (a) 25-45 % 1,6-hexane diamine N-(6-aminoethyl) ~~with chloromethyl oxirane~~;
 - (b) 5-25 % 1H-imidazole chloro methyl oxirane copolymer ~~in water~~; and
 - (c) 40-60 % water.
8. (Cancelled).
9. (Currently Amended) ~~The A composition as claimed in either claim 7 or 8 of~~ claim 4, wherein the 1H-imidazole chloro methyl oxirane copolymer is ~~present~~ in a solution with water.

10. (Currently Amended) ~~The A composition as claimed in~~ of claim 9, wherein the ~~concentration of the 1H-imidazole chloro methyl oxirane copolymer in water is in the range of~~ is 30% to 50% in of the solution.

11. (Currently Amended) ~~The A composition as claimed in any preceding claim~~ of claim 1, wherein the polymer composition acts as is formed into a film to which the one or more chemical and/or biological agents ~~may be~~ are applied.

12. (Currently Amended) ~~The A composition as claimed in any preceding claim~~ of claim 11, wherein the ~~agent~~ one or more chemical and/or biological agents are is a non-water soluble ~~compound~~.

13. (Currently Amended) ~~The A composition as claimed in any of claims 4 to~~ claim 11, wherein the ~~agent~~ one or more chemical and/or biological agents are ~~may be~~ selected from one ~~of the following agents or more of:~~ dyes, perfumes, cosmetics, detergents, fragrances, pharmaceutical preparations, pheromones, insect repellents, anti-microbial agents, enzymes and micro-organisms.

14. (Currently Amended) ~~The A composition as claimed in any preceding claim~~ of claim 11, wherein the chemical and/or biological agent is up to 50 microns in size.

15. (Currently Amended) ~~The A composition as claimed in any preceding claim~~ of claim 11, wherein the ~~composition and/or agent~~ further ~~comprises an additive comprising one or more additives.~~

16. (Currently Amended) ~~The A composition as claimed in any of claims 4 to~~ claim 11, wherein the one or more chemical and/or biological agents ~~agent is~~ are dissolved or dispersed in a solvent.

17. (Currently Amended) A method ~~of~~ for coating or wrapping an ~~encapsulated~~ a chemical or biological agent ~~using a composition claimed in any preceding claim,~~ comprising contacting the ~~encapsulated~~ chemical or biological agent with ~~the a~~ composition of a polyamine, oxirane or mixture thereof.

18. (Currently Amended) ~~The A method of coating or wrapping as claimed in claim 17,~~ wherein the ~~coating or wrapping~~ method is carried out at temperatures in the range of 15 - 40°C at a pH in the range of 5.5 - 7.5.

19. (Currently Amended) ~~The A method of coating or wrapping as claimed in either claim 17 or claim 18,~~ wherein the method is performed using a comprising combining the chemical or biological agent and the composition of a polyamine or oxirane or mixture thereof using a high speed stirrer.

20. (Currently Amended) A substrate comprising at least a partial coating of partially coated or wrapped with a composition of a polyamine, oxirane or mixture thereof as claimed in any of claims 1 to 11 or produced by the method as claimed in any of claims 17 to 19.

21. (Currently Amended) The A substrate as claimed in claim 20, wherein the substrate is a cellulose based material, and/or protein based material or combinations thereof, and/or an encapsulated chemical or biological agent.

22. (Currently Amended) A method ~~of for~~ for dyeing fabric fabrics using a composition as claimed in any of claims 1 to 11, wherein the composition is used in conjunction with comprising contacting the fabric with a dye encapsulated in a composition of a polyamine, oxirane or mixture thereof.

23. (Currently Amended) The A method of dyeing fabrics as claimed in claim 22, wherein the encapsulated dye further comprises one or more additional compounds selected from salt, soda, wetting agents, leveling agents or dispersing agents are used to assist the action of the dye.

24. (Cancelled).

25. (Currently Amended) The A method of dyeing fabrics as claimed in any of claims claim 22 to 24, further comprising wherein after the application of the dye to the fabric, treating the fabric is treated with an after treatment after the step of contacting.

26. (Currently Amended) The A method of dyeing fabrics as claimed in any of claims claim 22 to 24, wherein the composition is used to comprising pre-treating pre-treat the fabric prior to the application of applying the dye.

27. (Currently Amended) The A method of dyeing fabrics as claimed in any of claims claim 22 to 26, wherein the composition and/or the agent is applied to a surface step of contacting is carried out by one or more of the following techniques: technique selected from spraying, printing, padding or exhaustion techniques.

28. (Currently Amended) The A method of dyeing fabrics as claimed in any of claims claim 22 to 27, wherein the method comprises comprising the steps of:

- (a) immersing the fabric in water;
- (b) heating the water to a temperature of between 15 - 30°C;
- (c) cleaning the fabric so as to remove most contaminants;
- (d) adjusting the pH of the liquid to between 8 - 10;
- (e) adding the composition to the water to form a liquid;
- (f) heating the liquid to a temperature of between 40 - 80°C;

(g) draining the liquid and rinsing the fabric;
(h) adjusting the pH of the liquid to between 5 - 8 if necessary;
(i) adding a ~~colourant~~ colorant; and
(j) heating the liquid to a temperature in the range of 50°C-70°C; ~~(k) optionally, after-~~
~~treating the fabric; and (l) draining the liquid from the fabric.~~

29. (Currently Amended) ~~The A method of dyeing fabrics as claimed in~~
~~claim 28, wherein step (j) is preceded with the additional step of adding a cellulase enzyme to~~
~~the liquid~~ is performed after the step of adding a colorant.

30. (Currently Amended) ~~The A method of dyeing fabrics as claimed in~~
~~either claims claim 28 or 29, wherein the colourant~~ colorant is selected from one or more of
~~the following colourants: colorant selected from~~ reactive dyes, direct dyes, acid dyes and
pigments.

31. (Currently Amended) ~~The A method of dyeing fabrics as claimed in~~
~~any of claims 22 to 30 claim 28, wherein the method further comprises the addition of adding~~
~~a suitable~~ handle modifier.